

# Cube

FREESTANDING GAS FIREPLACE

# **OWNER'S MANUAL**





WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier.

# SAFETY PRECAUTIONS



# **WARNING:**

#### FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Leave the building immediately.
  - Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

# **INSTALLER:**

Leave this manual with the appliance.

#### **CONSUMER:**

Retain this manual for future reference.

This appliance may be installed in an after-market permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

Massachusetts installations (Warning): This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts. Other Massachusetts code requirements: Flexible connector must not be longer than 36in., a shut off valve must be installed; only direct vent sealed combustion products are approved for bedrooms/bathrooms. A carbon monoxide detector is required in all rooms containing gas fired direct vent appliances. The fireplace damper must be removed or welded in the open position prior to installation of a fireplace insert.

# SAFETY PRECAUTIONS

# FOR SAFE INSTALLATION AND OPERATION OF YOUR "ENVIRO" HEATER, PLEASE CAREFULLY READ THE FOLLOWING INFORMATION:

- All ENVIRO gas-fired appliances must be installed in accordance with their instructions. Carefully read all the instructions in this manual first. Consult the building authority having jurisdiction to determine the need for a permit prior to commencing the installation.
- **NOTE**: Failure to follow these instructions could cause a malfunction of the fireplace, which could result in death, serious bodily injury, and/or property damage.
- Failure to follow these instructions may also void your fire insurance and/or warranty.

#### **GENERAL**

- Installation and repair should be done by a qualified service person. The appliance should be inspected before the first use and, at least, annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative the control compartments, burners and circulating air passageways of the appliance be kept clean.
- Due to high temperatures, the appliance should be located out of high traffic areas and away from furniture and draperies.

# Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burn or clothing ignition.

- Young children should be carefully supervised when in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is required if there are at risk individuals in the house. To restrict access to a fireplace or stove install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces. Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance.
- Clothing or other flammable materials should not be placed on or near the appliance.

• A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals. If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance

#### FOR YOUR SAFETY

- Installation and service must be performed by a qualified installer, service agency or gas supplier.
- This installation must conform to local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/ NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.
- To prevent injury, do not allow anyone who is unfamiliar with the stove to operate it.
- To prevent injury, if the pilot or pilot and burners have gone out on their own, open the glass door and wait 5 minutes to air out before attempting to re-light the stove.
- Always keep the area around these appliances clear of combustible material, gasoline and other flammable liquids and vapours.
- These appliances should not be used as a drying rack for clothing or for hanging Christmas stockings/decorations.
- Due to the paint curing on the stove, a faint odour and slight smoking will likely be noticed when the stove is first used. Open a window until the smoking stops.

Always connect this gas stove to a vent system and vent to the outside of the building envelope. Never vent to another room or inside the building. Make sure the specified vent pipe is used, properly sized and of adequate height to provide sufficient draft. Inspect the venting system annually for blockage and signs of deterioration.

**WARNING:** Failure to position the parts in accordance with the diagrams in this booklet, or failure to use only parts specifically approved with this appliance, may result in property damage or personal injury.

**WARNING:** Do not operate with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.

- Never use solid fuels such as wood, paper, cardboard, coal, or any flammable liquids, etc., in this appliance.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system or any gas control which has been under water.
- Do not abuse the glass by striking it or slamming the door shut.
- If the Cube unit is pulled out of its installation, and the ventair intake system is disconnected for any reason, ensure that the vent-air intake pipes are reconnected and re-sealed in accordance to the instructions noted in the Initial Installation section of the manual.





HOT GLASS WILL CAUSE BURNS

**DO NOT TOUCH** GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and must be installed for the protection of children and other at-risk individuals.

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# CODES AND APPROVALS

**DIRECT VENT ONLY:** This type is identified by the suffix DV. This appliance draws all of its air for combustion from outside the dwelling, through a specially designed vent pipe system.

**TOP VENT DV** Certified for installation from 0-4500 ft (0-1372 m)

REAR VENT DV Certified for installation from 0-4500 ft (0-1372 m) with 36" (915 mm) snorkel (refer to section "Converting Top Vented into Rear Vented" on page 33).

In the USA: The appliance may be installed at higher altitudes. Please refer to your American Gas Association guidelines which state: the sea level rated input of Gas Designed Appliances installed at elevations above 2000 (610 m) feet is to be reduced 4% for each 1000 feet (305 m) above sea level. Refer also to local authorities or codes which have jurisdiction in your area regarding the de-rate guidelines.

In Canada: When the appliance is installed at elevations above 4500 feet (1372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1000 feet (305 m).

 This appliance has been tested by INTERTEK and found to comply with the established VENTED GAS FIREPLACE HEATER standards in CANADA and the USA as follows:

# **VENTED GAS FIREPLACE HEATER (Cube; NG/LPG)**

TESTED TO: ANSI Z21.88 / CSA 2.33 VENTED GAS FIREPLACE HEATERS

CSA 2.17 GAS FIRED APPLIANCES FOR HIGH ALTITUDES

CSA P.4.1 TESTING METHOD FOR MEASURING ANNUAL FIREPLACE EFFICIENCY

# This ENVIRO CUBE Fireplace:

- Has been certified for use with either natural or propane gases. (See rating label.)
- Is not for use with solid fuels.
- Is approved for bedroom or bed sitting room. (IN CANADA: must be installed with a listed wall thermostat.

  IN USA: see current ANSI Z223.1 for installation instructions.)
- Must be installed in accordance with local codes. If none exist, use current installation code CAN/CGA B149 in Canada or ANSI Z223.1/NFPA 54 in the USA.
- Must be properly connected to an approved venting system and not connected to a chimney flue serving a separate solid-fuel burning appliance.

**IMPORTANT NOTICE (Regarding first fire up):** When the unit is turned on for the first time, it should be turned onto high without the fan on for the first 4 hours. This will cure the paint, logs, gasket material and other products used in the manufacturing process. It is advisable to open a window or door, as the unit will start to smoke and can irritate some people. After the unit has gone through the first burn, turn the unit off including the pilot, let the unit get cold then remove the glass door and clean it with a good gas fireplace glass cleaner, available at your local ENVIRO dealer.



gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

# SPECIFICATIONS

# **WARNING:**

Operation of this heater when not connected to a properly installed and maintained venting system can result in carbon monoxide (CO) poisoning and possible death.

# **DIMENSIONS**

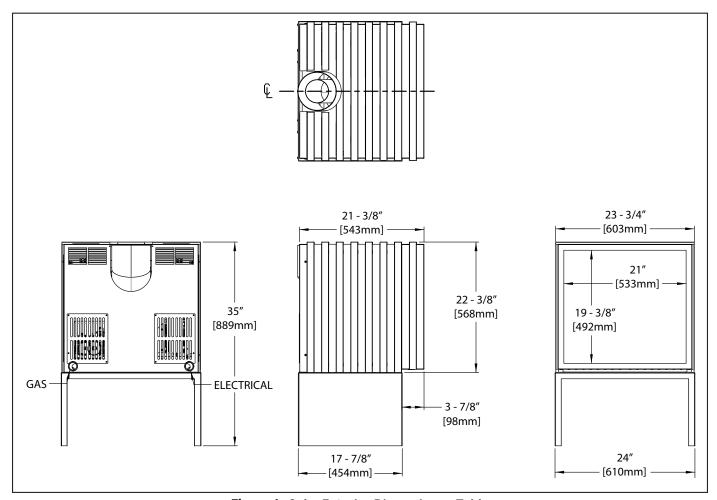
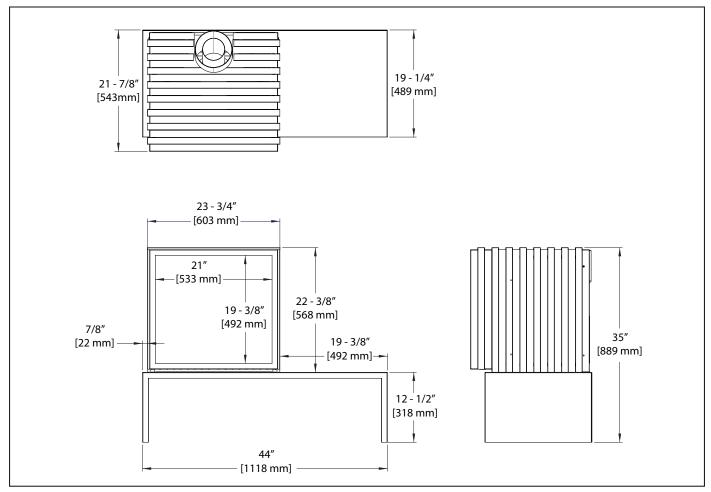


Figure 1: Cube Exterior Dimensions - Table

# SPECIFICATIONS



**Figure 2: Cube Exterior Dimensions - Long Table** 

# **RATING LABEL LOCATION**

The Rating Label is located on a plate hanging on the back left of the unit.

# For Your Safety, Read Safety Precautions And Lighting Instructions Before Operating

WARNING: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY A FIRE OR EXPLOSION MAY RESULT, CAUSING PROPERTY DAMAGE, PERSONAL INJURY OF LOSS OF LIFE.

## **PILOT LIGHTING INSTRUCTIONS**

#### FOR YOUR SAFETY READ BEFORE OPERATING

**WARNING:** IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

A. This appliance is equipped with an ignition device which automatically lights the pilot. Do <u>not</u> try to light the pilot by hand.

B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor. WHAT TO DO IF YOU SMELL GAS:

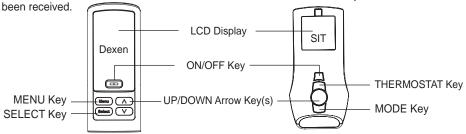
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. Use only the remote supplied with this fireplace. Never use tools, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### **OPERATING INSTRUCTIONS**

- 1. STOP! Read the safety information above on this label.
- 2. Read the owner's manual including the section on "Remote Control" operation.
- 3. Turn off all electric power to the appliance.
- 4. Do not attempt to light the pilot by hand.
- 5. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
- 6. Turn on all electric power to the appliance.
- 7. Using the remote control, press the ON/OFF key on the remote. "ON" will be indicated on the display of the remote and an audible "beep" will be heard at the unit to indicate the command has



8. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

## TO TURN OFF GAS TO APPLIANCE

- Set thermostat to lowest setting, or press the ON/OFF or Power Key. "OFF" will be indicated on the display and an audible "Beep" will be heard at the unit to indicate the command has been received.
- 2. Turn off all electric power to the appliance if service is to be performed.

C-16320

**Figure 3: Lighting Instruction Label** 

## AIR SHUTTER

The air shutter is controlled with the primary air adjustment rod located behind the gas valve shown in Figure 4

The air shutter allows the amount of air coming into the fireplace to be adjusted in order to accommodate different climates and venting arrangements. Start the pilot and then the burner. Make sure the pilot flame is burning normally and none of the burner ports are plugged. Let the fireplace burn for roughly fifteen (15) minutes and then examine the flames, compare the flames to Figure 73.

The ideal flame will be blue at the base and light orange above. The flames should be of medium height. If the flames look like this, no venturi adjustment is needed. If the flames are fairly short and mostly blue, the fireplace is getting too much air. Therefore, the air shutter should be closed slightly until the correct flames are achieved. Flames that are very orange, with tall, dark, stringy tips, are not getting enough air. Open the venturi until the flames clean up. If the venturi is opened, or closed all the way, and the correct flames cannot be attained, turn off the gas and contact the dealer.

Table 1: Venturi Information.

	Natural Gas	Propane
Venturi Setting	<sup>1</sup> / <sub>16</sub> " min.	3/16" min.

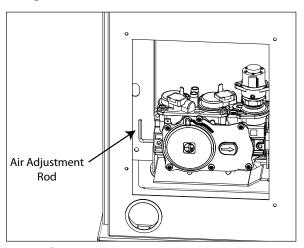


Figure 4: Gas Valve In Place on Unit

**Warning:** Incorrect venturi adjustment may lead to improper combustion, which is a safety hazard. Contact the dealer if there is any concern about the venturi adjustment.

# NORMAL SOUNDS DURING OPERATION

**Table 2: Normal Sounds** 

Component	Sound & Reason
Cube	Creaking when heating up or cooling down.
Burner	Light pop or poof when turned off; this is more common with LP units.
Temperature Sensor	Clinking when it senses to turn the blower on or off.
Pilot Flame	Quiet whisper while the pilot flame in on.
Blower / Fan	Air movement that increase and decreases with the speed of the blower. The blower is pushing the heat from the fireplace into the room.
Gas Control Valve	Dull click when turning on or off, this is the valve opening and closing.

**NOTE:** Check that all burner holes are lit.

# TO TURN GAS FIREPLACE OFF

Flip the burner switch to OFF to turn off burner only.

If the fireplace is to be turned off for the season or for servicing, turn control knob to OFF, turn the gas shut off valve to OFF. DO NOT FORCE IT. If the unit is going to be serviced, turn off the electrical power to the unit as well.

**NOTE:** When the unit is turned on for the first time, it should be turned onto high, with the fan OFF, for the first four (4) hours. This will cure the paint, logs, gasket material, and other products used in the

manufacturing process. It is advised that a door or window be opened as the unit will start to smoke, which can irritate some people. After the unit has gone through the first burn, turn the unit OFF, including the pilot, and let the unit completely cool. Then remove the glass and clean it with a good gas fireplace glass cleaner, available at your local Enviro dealer. See section "Cleaning The Glass" on page 16 and section "Glass Door Removal" on page 18.

#### REMOTE CONTROL OPERATIONS

Proflame 2 is a modular remote control system that directs the functions of the Cube. The Proflame 2 TMFSLA is configured to control the on/off main burner operation, its flame levels and provides on/off and Smart thermostatic control of the appliance. The system also controls the fan speed through six (6) levels.

#### SYSTEM DESCRIPTION

The Proflame 2 Remote Control System consists of two (2) elements:

- 1. Proflame 2 Transmitter.
- 2. Integrated Fireplace Controller (IFC) and a wiring harness to connect to the gas valve and stepper motor.

## ATTENTION!

- TURN "OFF" THE MAIN GAS SUPPLY OF THE APPLIANCE DURING INSTALLATION OR MAINTENANCE OF THE IFC.
- TURN "OFF" MAIN GAS SUPPLY TO THE APPLIANCE PRIOR TO REMOVING OR REINSERTING THE BATTERIES IN THE BATTERY HOLDER

#### TECHNICAL DATA

# **Transmitter (Remote Control):**

Supply voltage: 4.5 V (three 1.5 V AAA batteries)

Radio frequency: 315 MHz

# **Integrated Fireplace Controller (IFC):**

Supply voltage: AC IN - 120 V / 60 Hz

Battery Backup IN - 6 Vdc - 200mA (four 1.5 V AA batteries)

Spark voltage / frequency: >10kV / 1Hz Comfort modulating fan: 120 V / 60 Hz / 2A Auxiliary: 120 V / 60 Hz / 5A (not used)

## **TRANSMITTER**

The Proflame 2 Transmitter is a black remote control with a blue backlit lcd display. It uses a streamline design with a simple button layout and informative lcd readout (Figure 6). The Transmitter is powered by three (3) AAA type batteries. A Mode Key is provided to Index between the features and a Thermostat Key is used to turn on/off or index through Thermostat functions (Figure 5 & Figure 6)



**Figure 5: Proflame 2 Transmitter.** 

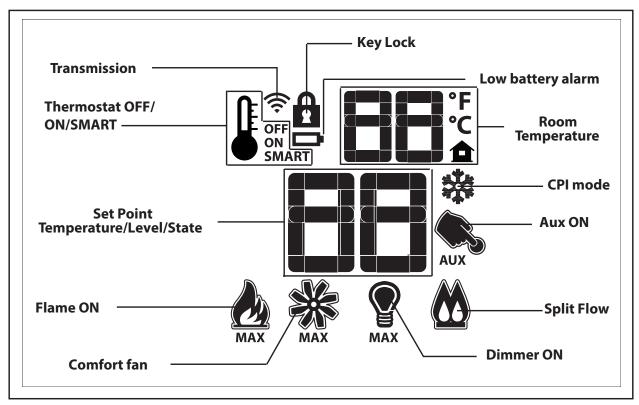
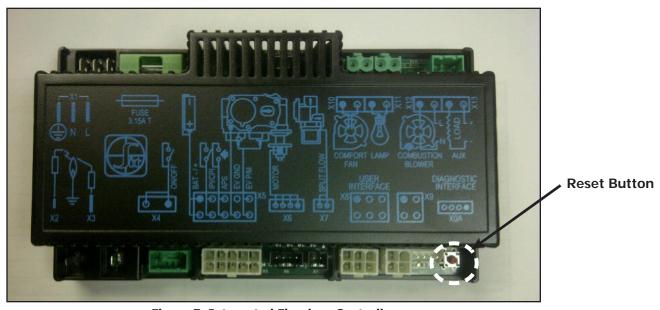


Figure 6: Proflame 2 Transmitter LCD Screen.

# INTEGRATED FIREPLACE CONTROLLER (IFC)

The Proflame 2 IFC (Figure 7) connects directly to the gas valve, split flow valve, stepper motor, pilot and convection fan with a wiring harness. The IFC is mainly powered by 120 VAC but can also run off a battery backup four (4) AA type batteries for shorter periods of time. The IFC accepts commands via radio frequency from the Transmitter to operate the appliance in accordance with the particular Proflame 2 system configuration. The IFC has a red reset button at the front right corner that is used is to synchronize the Transmitter when using the for the first time, or after the batteries have been replaced.



**Figure 7: Integrated Fireplace Controller** 

#### **OPERATING PROCEDURE**

# **Initializing The System For The First Time**

Install the four (4) AA batteries into the IFC battery holder. Note the polarity of the battery and insert into the battery bay as indicated on the body of the battery holder. Press the reset button on the IFC marked "SW1" (see Figure 7).

The IFC will "beep" three (3) times to indicate that it is ready to synchronize with a Transmitter. Install the three (3) AAA type batteries in the Transmitter battery bay, located on the base of the Transmitter. With the batteries already installed in the Transmitter, push the 'ON' button. The IFC will "beep" four (4) times to indicate the

Transmitter's command is accepted and sets to the particular code of that Transmitter. The system is now initialized.

# **Temperature Indication Display**

With the system turned OFF, press the Thermostat Key and the Mode Key at the same time. Look at the LCD screen on the transmitter to verify that a °C or °F is visible to the right of the Room Temperature display (see Figure 8).



Figure 8: Remote Control Display in Fahrenheit and Celsius.

# **Turn on the Appliance**

Press the ON/OFF Key on the Transmitter. The

Transmitter display will show all active Icons on the screen. A single "beep" from the IFC will confirm reception of the command and will commence to first ignite the pilot light, followed by the main burner. This should take about 10 seconds to complete.

## SWITCHING TO CONTINUOUS PILOT MODE

When the Cube is turned off press the mode key to index to the constant pilot (CPI) mode icon (see Figure 9). Pressing the up arrow key will select Continuous Pilot Ignition (CPI) and pressing the down arrow key will return to IPI. Once a selection is made the IFC will beep once to confirm it had received the command. **NOTE:** It is recommended to use the continuous pilot mode during the winter when the outside temperature is below 50°F (10°C) to keep the chimney properly heated for updraft during burner ignition. Continuous pilot mode also keeps the firebox warm which eliminates both heat loss to cold air that is trapped inside the firebox as well as excessive exhaust vapour condensation on the door glass.

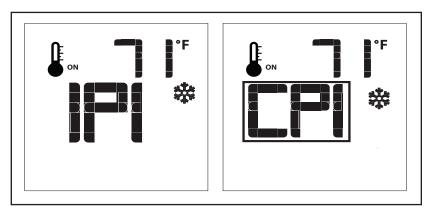


Figure 9: CPI Pilot Mode.

# **Turn off the Appliance**

Press the ON/OFF Key on the Transmitter. The Transmitter LCD display will only show the room temperature and Icon (see Figure 10). A single "beep" from the IFC confirms reception of the command and both the pilot light (if the unit is not set to continuous pilot) and main burner will turn off.

# **Room Thermostat (Transmitter Operation)**

The Remote Control can operate as a room thermostat. The thermostat can be set to a desired temperature to control the comfort level in a room. To activate this function, press the Thermostat Key (see Figure 5). The LCD display on the Transmitter will change to show that the room thermostat is "ON" and the set temperature is now displayed (see Figure 10). To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter.

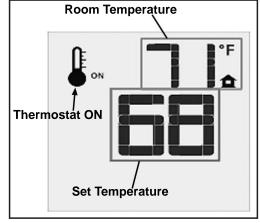


Figure 10: Remote Control Displays Set Temperature.

# Smart Thermostat (Transmitter Operation) The Smart Thermostat function adjusts the flar

The Smart Thermostat function adjusts the flame height in accordance to the difference between the set point temperature and the actual room temperatures. As the room temperature gets closer to the set point the Smart Function will modulate the flame down. To activate this function, press the Thermostat Key (Figure 5) until the word "SMART" appears to the right of the temperature bulb graphic (Figure 11). To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter.

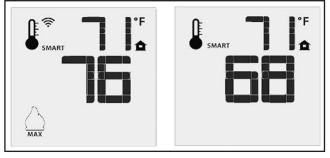


Figure 11: Remote Control's Smart Flame Function.

#### **Remote Flame Control**

The Proflame 2 remote control system has six (6) flame levels. With the system on, and the flame level at the maximum in the appliance, pressing the Down Arrow Key once will reduce the flame height by one step until the flame is turned off. The Up Arrow Key will increase the flame height each time it is pressed. If the Up Arrow Key is pressed while the system is on but the flame is off, the flame will come on in the high position. A single "beep" will confirm reception of the command.

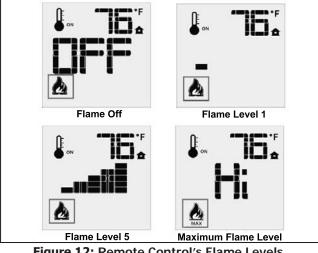


Figure 12: Remote Control's Flame Levels.

# Fan Control (if equipped)

The Cube has an optional convection fan kit that can be controlled with the Transmitter. The fan speed can be adjusted through six (6) speeds. To control the fan press the Mode key to index to the fan control icon. Use the UP/DOWN arrow keys to turn on, off, or adjust the fan speed. A single beep from the IFC will confirm the command has been received

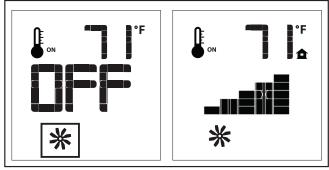


Figure 13: Fan Control

# **Auxiliary Control**

This function is not used on the Cube and can be disregarded.

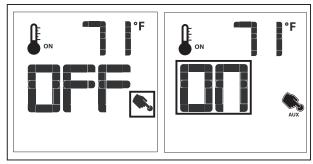


Figure 14: Auxiliary Control (not used)

#### **Dimmer Control**

This function is not used on the Cube and can be disregarded.

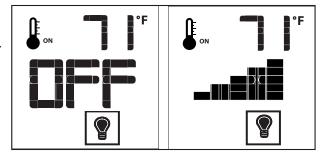


Figure 15: Dimmer Control

#### **Key lock**

This function will lock the keys to avoid unsupervised operation. To activate this function, press the Mode and UP keys at the same time and the a lock will appear (see Figure 16). To de-activate this function, press the Mode and UP Keys at the same time.

## **Low Battery Power Detection**

Transmitter: The life span of the remote control batteries depends on various factors: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room thermostat set point etc. When the Transmitter batteries are low, a Battery Icon will appear on the LCD display of the Transmitter (see Figure 17) before all battery power is lost. When the batteries are replaced this icon will disappear.

IFC: The life span of the IFC batteries depends on various factors during a prolonged power outage: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room thermostat set point etc. When the IFC batteries are low, No "beep" will be emitted when it receives an On/Off command from the Transmitter. This is an alert for a low battery condition for the IFC. When the batteries are replaced the "beep" will be emitted from the IFC when the ON/OFF Key is pressed (See Initializing the System for the First Time).

WARNING: Fire Hazard. Can cause severe injury or death. The Transmitter causes ignition of the appliance. The appliance can turn on suddenly. Keep away from the appliance burner when operating the remote system.

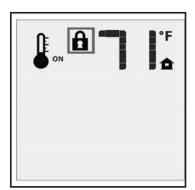


Figure 16: Key Lock

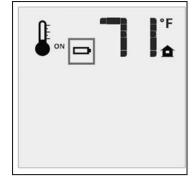


Figure 17: Low Battery

WARNING: Shock Hazard. Can cause severe injury or death. This device is powered by line voltage. Do not try to repair this device. In no way is the enclosure to be tampered with or opened. Disconnect from line voltage before performing any maintenance.

CAUTION: Property Damage Hazard. Excessive heat can cause property damage. The appliance can stay lit for many hours. Turn off the appliance if it is not going to be attended for any length of time. Always place the Transmitter where children cannot reach it.

#### **CLEANING THE GLASS**

When the fireplace has cooled, remove the face of the fireplace along with the glass. See section "Glass Door Removal" on page 18. Check the gasket material on the back of the glass, making sure that it is attached and intact.

During a cold start up, condensation will sometimes form on the glass. This is a normal condition with all fireplaces. However, this condensation can allow dust and lint to cling to the glass surface. Initial paint curing of the appliance can leave a slight film behind the glass, a temporary problem. The glass will need cleaning about two weeks after installation. **Use a mild glass cleaner and a soft cloth; abrasive cleaners will damage the glass and plated surfaces.** Depending on the amount of use, the glass should require cleaning no more than two or three times a season. **Do not clean the glass when it is hot.** 

#### CLEANING THE FIREBOX

Remove the logs carefully, as they are very fragile. Gently remove all the embers and rock wool and place on a paper towel. Vacuum the bottom of the firebox thoroughly. Carefully clean any dust off the logs and remove any lint from the burner and pilot. At this time, inspect the burner pan for cracking or severe warping. If a problem is suspected, contact the dealer. Check the logs for deterioration or large amounts of soot; a small amount on the bottom side of the logs is normal. Replace the logs and embers as shown in section "Installation of Log Set and Embers" on page 41. If new/more embers and rock wool are required, contact your nearest ENVIRO dealer.

#### REPLACING THE GLASS

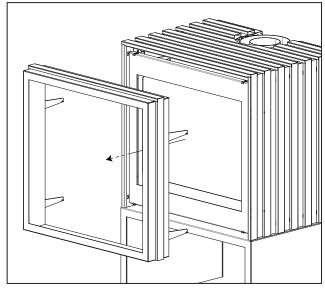
The glass in the fireplace is a high temperature ceramic. If the glass is damaged in any way, a factory replacement is required (see section "Parts List" on page 47). Wear gloves when handling damaged glass door assembly to prevent personal injury. When the glass door assembly is being transported, it must be wrapped in newsprint and tape and/or a strong plastic bag. Do not operate with the glass front removed, cracked or broken. Removal and replacement of the glass from the door **must** be done by a licensed or qualified service person. **The glass must be purchased from an ENVIRO dealer. No substitute materials are allowed.** 

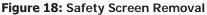
#### To Replace:

- Open door and remove the glass carefully. See section "Glass Door Removal" on page 18
- Install the new piece of glass with the large bulb in the gasket tape against the unit. Place the joint in the tape in a bottom corner. Close door.

## SCREEN AND OUTER GLASS REMOVAL

Turn the unit off and wait for it to fully cool down before proceeding. Both the safety screen and outer glass are attached using four hooks. To remove, lift up to disengage the hooks from their attachment points and pull away from the unit. See Figure 18 and Figure 19.





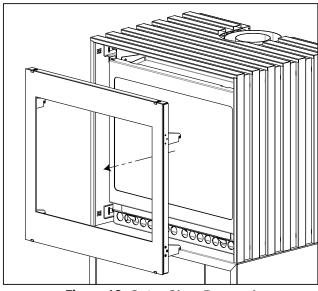


Figure 19: Outer Glass Removal

# BACK COVER AND TOP PLATE REMOVAL

Turn the unit off and wait for it to fully cool down before proceeding. Remove the screen and outer glass to allow access to the glass door (see section "Screen and Outer Glass Removal" on page 16).

The back cover is secured to the unit with four (4) #8 T20 screws, two on each side. Remove these four screws and pull the cover away from the unit as shown in Figure 20.

The top plate is not attached using any fasteners. It is held in place using multiple tabs on each side panel. To remove, simply life the top plate up and away from the unit. To reattach, align the tabs on the side panels with their respective slots and place on top.

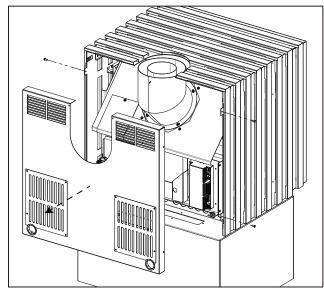


Figure 20: Back Cover Removal

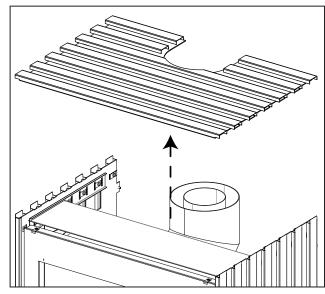


Figure 21: Top Plate Removal

## SIDE PANEL REMOVAL

Turn the unit off and wait for it to fully cool down before proceeding. Remove the screen and outer glass to allow access to the glass door (see section "Screen and Outer Glass Removal" on page 16).

Remove the back cover and top plate as shown in section "Back Cover and Top Plate Removal" on page 17.

The side panels are secured to two (2) brackets on each side of the firebox. To remove, simply lift the side panel up to detach from the brackets and pull away from the unit.

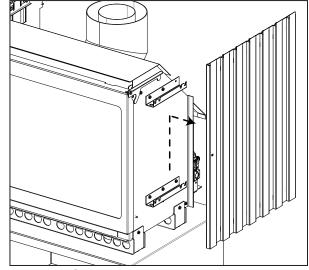


Figure 22: Side Panel Removal

#### GLASS DOOR REMOVAL

Turn the unit off and wait for it to fully cool down before proceeding. Remove the screen and outer glass to allow access to the glass door (see section "Screen and Outer Glass Removal" on page 16).

Remove the back cover and top plate as shown in section "Back Cover and Top Plate Removal" on page 17.

Remove the side panels as shown in section "Side Panel Removal" on page 18.

With the top cover removed, the top heat shield can be pivoted back to more easily access the glass door

(see Figure 23). The glass door has two handles securing it to the unit. Lift the handles straight up to release the door, then lift the door up and away from the unit. When reattaching the door, align the tabs on the bottom edge of the door with thier respective slots before resealing the handles.

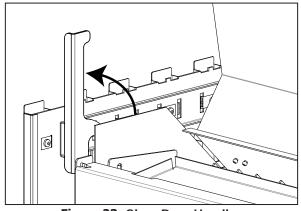


Figure 23: Glass Door Handles

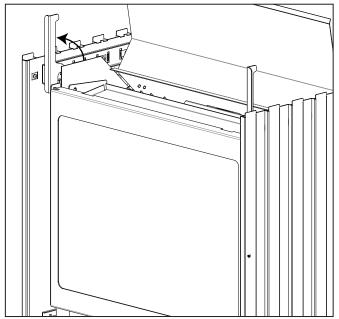


Figure 24: Glass Door Removal

# **BURNER REMOVAL**

- 1. Remove the door as shown in section "Glass Door Removal" on page 18.
- 2. Carefully remove the log set and ember material.
- 3. Remove the two (2) screws (located on the outside edges of the burner) that hold the burner to the chassis inside the fire box. Remove the burner tray from the firebox.

#### FUEL CONVERSION

# TO BE INSTALLED BY A QUALIFIED SERVICE AGENCY ONLY

Please read and understand these instructions before installing.

Warning: This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper or complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.

#### Kit Parts List for all Cube IPI models:

- 1 Orifice (NG: #39) or (LP: #53)
- 1 Pilot Orifice (NG: 0.2) or (LP: 0.14)
- 1 Servo Regulator with diaphragm
- 1 Installation instruction sheet
- 2 Conversion labels

Carefully inspect all parts supplied with this conversion kit. If any parts have been damaged or are missing, contact your dealer, distributor or courier company to have them replaced before starting this installation.

#### Conversion Kit Installation:

- 1. Turn the unit off by pressing the ON/OFF Key on the remote and shut off gas supply at the shut-off valve upstream of the unit. CAUTION: The gas supply must be shut off prior to disconnecting the electrical power and before proceeding with the conversion. Allow the valve and unit to cool down to room temperature.
- 2. Remove the glass door as shown in section "Glass Door Removal" on page 18
- 3. Carefully remove the log set, and media.
- 4. Remove the burner as shown in section "Burner Removal" on page 18.
- 5. Convert the pilot:
  - a. Using a <sup>7</sup>/<sub>16</sub>" wrench, loosen the pilot head counter clockwise and fully remove
  - b. Remove the existing orifice and replace with the one supplied in the kit (see Figure 25)
  - c. Re-install the pilot head and tighten until it is back in the proper position (see Figure 26)



Figure 25: Pilot Orifice



**Figure 26: Proper Pilot Position** 

- 6. Convert the burner orifice:
  - a. Remove the main burner orifice with a 1/2" socket
  - b. Put a bead of pipe-thread sealant into the orifice mount. DO NOT OVER-TIGHTEN
  - c. Install the new orifice:
- 7. Convert the SIT gas valve:
  - a. Use a T-20 driver to remove the two screws that hold the servo regulator to the gas valve and disconnect the wire harness from the IFC.
  - b. Remove the rubber regulator diaphragm that is situated between the servo regulator and the valve body. The new servo regulator already has this diaphragm installed.
  - c. Install the LP or NG servo regulator, with the new longer T-20 screws included in the kit and connect the harness to the IFC.
- 8. Reinstall the burner, log set, media, and glass door. Also refer to section "Installation of Log Set and Embers" on page 41. When re-installing the burner, ensure that the burner to pilot hood relationship is similar to what is shown in Figure 27.
- 9. Reconnect the main gas line if it was disconnected and open the shut-off valve at the gas line to the unit.
- 10. Reconnect the electrical power to the unit.
- 11. Use a small brush to apply a warm soapy water solution to all gas connections (use a half dish soap and half warm water). If a gas leak is present, bubbling will occur. Gas leaks can be repaired by using an approved pipe thread sealant or approved Teflon tape. NEVER USE AN OPEN FLAME WHEN TESTING FOR LEAKS.
- 12. Relight the pilot and confirm the flame properly covers the flame sensor. Should the pilot require adjustment, turn the adjustment screw (see Figure 63) clockwise to decrease or counterclockwise to increase until the correct flame is achieved.
- 13. Relight the main burner in both the "HI" and "LO" positions to verify proper burner ignition, operation and proper flame appearance (See Owner's Manual). Confirm the inlet and manifold pressures are within the acceptable ranges as directed in section "Gas Line Connection and Testing" on page 39.



Figure 27: Correct Pilot

**In the USA:** The appliance may be installed at higher altitudes. Please refer to your American Gas Association guidelines which state: the sea level rated input of Gas Designed Appliances installed at elevations above 2000 (610 m) feet is to be reduced 4% for each 1000 feet (305 m) above sea level. Refer also to local authorities or codes which have jurisdiction in your area regarding the de-rate guidelines.

In Canada: When the appliance is installed at elevations above 4500 feet (1372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1000 feet (305 m).

14. MAKE SURE that the conversion label is installed on or close to the rating label to signify that the unit has been converted to a different fuel type.

# **QUALIFIED INSTALLERS ONLY**

**Warning:** Operation of this heater when not connected to a properly installed and maintained venting system can result in carbon monoxide (CO) poisoning and possible death.

#### PREPARATION FOR INSTALLATION

- Remove the packaging from the appliance, and check to make sure there is no damage. If damage is found, please report it to both the carrier and your dealer as soon as possible.
- Before beginning, carefully check the glass door and the log set
- Locate a position where the flue system of the stove can be properly installed without damaging the integrity of the building; e.g. cutting a wall or ceiling joist.
- · Check stove and flue system clearance requirements.
- Locate the stove where it can be accessed by a gas supply line.
- Locate the stove in a large and open room that is centrally located in the house. This will optimize heat circulation and comfort.
- As the stove can be equipped with a convection fan, ensure that an electrical outlet is within 6 ft (1.8 m) of the stove.
- The flow of combustion and ventilation air must not be obstructed.

# **CLEARANCES TO COMBUSTIBLES**

A. Sidewall to unit

B. Backwall to unit

C. Corner to unit

2.5 inches (6.35 cm)

2.5 inches (6.35 cm)

2.6 inches (6.35 cm)

D. Ceiling 45 inches above floor (114.3 cm)

# Back wall Back wall Front Adjacent wall C Logical Action of the part of t

Figure 28: Clearances to combustibles.

# **Minimum Alcove Dimensions:**

Width 46 inches (116.8 cm)
Height 45 inches (114.3 cm)
Depth (max) 24 inches (60.96 cm)

#### CLEARANCES MUST BE SUFFICIENT TO ALLOW ACCESS FOR MAINTENANCE AND SERVICE.

## PLANNING YOUR INSTALLATION

When planning your installation, it will be necessary to select the proper length of vent pipe for your particular requirements. It is important to note when passing through a wall, the maximum allowable wall thickness is 10 inches (25.4 cm), 1½ inches (3.8 cm) clearance to combustibles must be maintained. Select the amount of vertical rise desired for "vertical-to-horizontal" type installations. To determine the length of vent pipe required for vertical installations, measure the distance from the appliance flue outlet to the ceiling, the ceiling thickness, the vertical rise through the attic or second story, and allow for sufficient vent height above the roof line. For two story applications, a fire stop is required at each floor level. If an offset is needed in the attic, additional pipe and elbows will be required. To connect the venting system to the appliance flue outlet, a twist-lock adapter is built into the appliance at the factory. Refer to section "Vent Configurations" on page 25 for venting parameters.

# QUALIFIED INSTALLERS ONLY

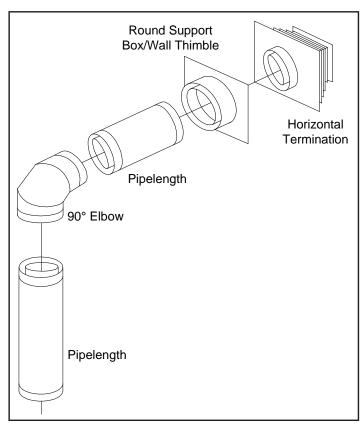


Figure 29: Common Horizontal Installation.

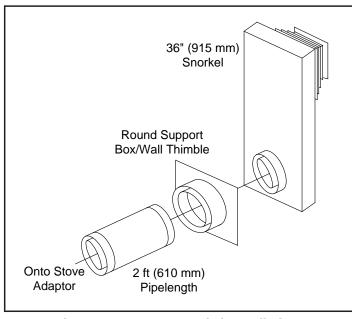


Figure 31: Common Snorkel Installation.

Your total vent pipe length must be within the shaded area of Figure 34. If a 90° elbow is used in the horizontal plane, 36" (91.4 cm) must be subtracted from the allowable horizontal run.

There are three (3) permitted types of Direct Vent System installations: horizontal (Figure 29), vertical (Figure 30) or snorkel (Figure 31).

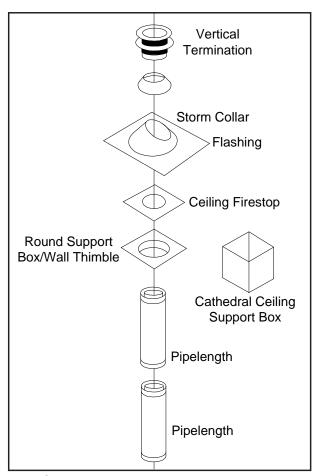


Figure 30: Common Vertical Installation.

# **QUALIFIED INSTALLERS ONLY**

# **VENT TERMINATION RESTRICTIONS**

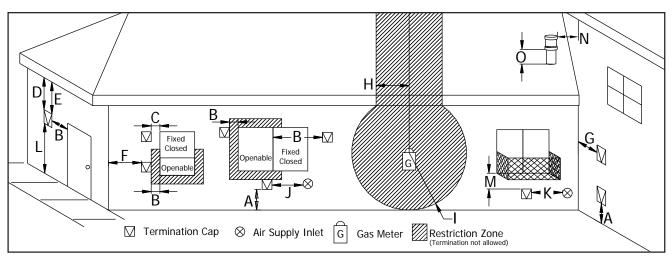


Figure 32: Vent Termination Restrictions, refer to Table 3.

Table 3: Vent termination clearances, refer to Figure 32.

Letter	Canadian Installation 1	US Installation <sup>2</sup>	Description	
А	12 in (30 cm)		Clearance above grade, verandah, porch, deck, or balcony.	
В	12 in (30 cm)	9 in (23 cm)	Clearance from window or door that may be opened.	
С	12 in (30 cm)*		Clearance from permanently closed window (to prevent condensation).	
D	24 in (60 cm)*		Vertical clearance to ventilated soffit located above the terminal, within a horizontal distance of 2 ft (60 cm) from center line of terminal.	
Е	18 in (45 cm)*		Clearance to unventilated soffit.	
F	12 in (	30 cm)*	Clearance to outside corner.	
G	12 in (30 cm)*		Clearance to inside corner.	
Н	3 ft (91 cm) within a height of 15 ft (4.5 m) above the meter/ regulator assembly	3 ft (91 cm) within a height of 15 ft (4.5 m) above the meter/ regulator assembly*	Clearance to each side of center line extended above meter/regulator assembly.	
I	3 ft (91 cm)	3 ft (91 cm)*	Radial clearance around service regulator vent outlet.	
J	12 in (30 cm)	9 in (23 cm)	Clearance to non-mechanical air supply inlet to building, or the combustion air inlet to any other appliance.	
K	6 ft (1.83 m)	3 ft (91 cm) above if within 10 ft (3 m) horizontally	Clearance to mechanical air supply inlet.	
L	7 ft (2.13 m <sup>)t</sup>	7 ft (2.13 m) <sup>*†</sup>	Clearance above paved sidewalk or paved driveway located on public property.	
М	12 in / 30 cm <sup>+</sup>	12 in / 30 cm* <sup>+</sup>	Clearance under verandah, porch, deck, or balcony.	
N	12 in (:	30 cm)*	Clearance horizontally to any surface (such as an exterior wall) for vertical terminations.	
0	12 in (30 cm)		Clearance above roof line for vertical terminations.	

<sup>1</sup> In accordance with the current CSA B149, Natural Gas and Propane Installation Code.

# NOTE: Venting terminals shall not be recessed into walls or siding.

In accordance with the current CSA B149, Natural Gas and Propale Installation Code.

In accordance with the current ANSI Z223.1 NFPA 54, National Fuel Gas Code.

These numbers are only estimates. Clearance in accordance with installation codes and the requirements of the gas supplier.

A year shall not terminate directly above a cide well or payed driveway that is legated between two cided family dwyllings as

A vent shall not terminate directly above a side walk or paved driveway that is located between two single family dwellings and it serves both dwellings.

<sup>+</sup> Permitted only if verandah, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

# **QUALIFIED INSTALLERS ONLY**

# APPROVED VENT PARTS

WARNING: Do not mix parts from different vent manufacturers' systems.

EXCEPTION TO WARNING: This product has been evaluated by Intertek for using a DirectVent Pro starting collar in conjunction with other venting systems. Use of this system with the DirectVent Pro starting collar is deemed acceptable and does not affect the Intertek listing of the appliance.

Table 4: Vent part numbers (Must state if galvanized or black wanted, PART NUMBERS).

Direct Vent	Direct-Temp	DirectVent Pro	Description	
4D7 (7")	4DT-06	46DVA-06	6" Pipe Length	
>	4DT-09	46DVA-09	9" Pipe Length	
4D2	4DT-12	46DVA-12	12" Pipe Length	
> <	4DT-18	46DVA-18	18" Pipe Length	
> <	4DT-24	46DVA-24	24" Pipe Length	
4D3	4DT-36	46DVA-36	36" Pipe Length	Approved — Termination Cap
4D4	4DT-48	46DVA-48	48" Pipe Length	- Top Adapter
><		46DVA-60	60" Pipe Length	
4D26A	4DT-TL14	46DVA-24TA	Adjustable Length	
4D45L	4DT-EL45	46DVA-E45	45° elbow	
4D90L	4DT-EL90S	46DVA-E90	90° elbow	Existing Metal
4DHVS	4DT-VS	46DVA-VSS	Vinyl siding standoff/sheild	Chimney System
4DWT	4DT-WT	46DVA-WT	Wall thimble	4-inch aluminum flex
4DSC	4DT-SC	46DVA-SC	Storm collar	pipe
4DFSP	4DT-FS	46DVA-WFS	Fire stop	
4DWS	4DT-WS	46DVA-WS	Wall strap/ support/band	Conversion
4DF	4DT-AF6	46DVA-F6	Flashing, standard roof pitch	Connector Any black direct vent
4DF12	4DT-AF12	46DVA-F7	Flashing, steep (up to 12/12) roof	pipe plus an adjustable length
> <		46DVA-FF	Flat flashing	to make a proper
		46DVA-VCH	High wind vertical termination	connection
4DHCS	4DT-HC	46DVA-HC	High wind horizontal termination	4.
	4DT-HKA / 4DT-HKB	46DVA-KHC	Horizontal termination kit	<b>1</b>
	4DT-CCKA	46DVA-KCA	Chimney Conversion Kit A	
4DRCKA	4DT-CCKB	46DVA-KCB	Chimney Conversion Kit B	USA ONLY
		46DVA-KCC	Chimney Conversion Kit C	

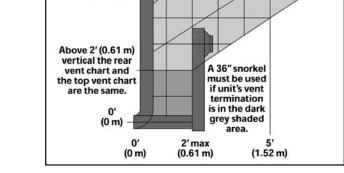
# **QUALIFIED INSTALLERS ONLY**

## **VENT CONFIGURATIONS**

32′ (9.75 m)

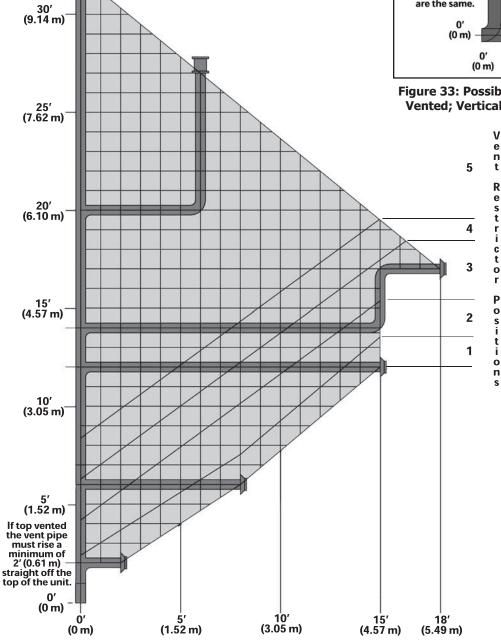
Figure 34 & Figure 35 show the range of venting options, they show possible vent configurations if the unit is top vented (see Figure 34) or rear vented (see Figure 35), for vertical and horizontal terminations, any layout that remains within the shaded area is acceptable. Having the fewest number of elbows is ideal, as they tend

to disrupt air movement. Using 45° elbows is preferable to using 90° elbows. Also, a shorter vent system will perform better than a longer one.



(1.52 m)

Figure 33: Possible Vent Configurations for Rear Vented; Vertical and Horizontal Terminations.



\*NOTE: 0,0 in Figure 34 & Figure 35 represent the outlet of the flue collar elbow.

Figure 34: Possible Vent Configurations for Top Vented; Vertical and Horizontal Terminations.

# **QUALIFIED INSTALLERS ONLY**

# RESTRICTOR SETTINGS

The **ENVIRO** CUBE has been designed with a built in restrictor plate. The restrictor is designed to enhance flame appearance when installing this unit with vertical chimneys as well as installations with longer horizontal vent applications. It does this by controlling the amount of air moving through the vent pipe.

Figure 34 shows the vent restrictor position required, relative to the length of vent pipe. Longer vertical vent lengths necessitate greater restriction; position 1 (Figure 36) is open and position 5 (Figure 37) is maximum restriction. To avoid injury, it is best to make this adjustment when the fireplace is cool or use welder's gloves or oven mitts.

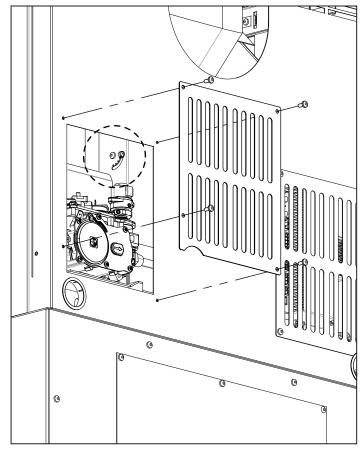
To access vent restrictor remove the valve cover plate from the right rear corner of the unit by undoing the four fastening screws. Refer to Figure 35.

Loosen the 1/4" hex head screw and adjust to the correct setting.

Slide the hex head screw to the next setting and re-tighten the screw to secure in place.

The numbers in this chart represent the actual vent restrictor settings. Although the numbers do not appear on the unit use this as a guide to follow.

Wait for unit to warm up to operating temperature to ensure proper and clean burning unit.



**Figure 35: Restrictor Adjustment Location** 

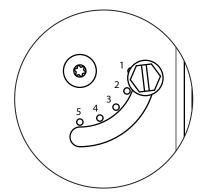


Figure 36: Restrictor Setting 1

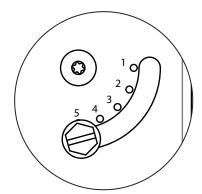


Figure 37: Restrictor Setting 5

# **QUALIFIED INSTALLERS ONLY**

## HORIZONTAL INSTALLATION

- **1.** Set the appliance in the desired location. Check to determine if wall studs or roof rafters are in the way when the venting system is attached. If this is the case, you may want to adjust the location of the appliance.
- 2. Direct vent pipe and fittings are designed with special twist-lock connections. Assemble the desired combination of black pipe and elbows to the appliance adapter with pipe seams oriented towards the wall or floor, as much out of view as possible.

Note: Horizontal runs of vent pipe must be supported every 36" (915mm). Wall straps are available for this purpose, also when running horizontal pipe minimum clearances to combustibles must be maintained; 2" (51mm) at top, 11/2" (38mm) at sides, 11/2" (38mm) at bottom.

- 3. With the pipe attached to the stove in the correct location, mark the wall for a 10" (25.4cm) x 10" (25.4 cm) square hole (refer to Figure 38). The center of the square hole should match the center line of the horizontal pipe. Cut and frame the 10" (25.4cm) x 10" (25.4cm) hole in the exterior wall where the vent will be terminated. Refer to Figure 32 and Table 3 for allowable locations. If the wall being penetrated is constructed of non-combustible material i.e. masonry or concrete, a 7" (17.8cm) hole is acceptable.
- **4.** Position the horizontal vent termination in the center of the 10" (25.4cm) x 10" (25.4cm) hole, and attach to the exterior wall with the four screws provided. Before attaching the vent termination to the exterior wall, run a bead of non-hardening mastic around the edges, so as to make a seal between the termination and the wall. The arrow on the vent termination should be

pointing up, insure that the proper clearances to combustible materials are maintained.

**5.** Before connecting the horizontal run of the vent pipe to the vent termination, slide the black decorative wall thimble cover over the vent pipe.

6. Slide the appliance and vent assembly towards the wall, carefully inserting the vent pipe into the cap assembly. It is important that the vent pipe extend into the vent cap a sufficient distance with a minimum of 1¼" (3.2cm) overlap. Secure the connection between the vent cap pipe and the vent cap by attaching the two sheet metal straps extending from the vent cap assembly into the outer wall of the vent pipe. Use the two sheet metal screws provided to connect the straps to the vent pipe. Bend any remaining portion of the sheet metal straps back towards the vent cap, so the decorative wall thimble will conceal it (see Figure 39).

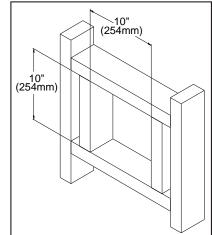


Figure 38: Wall Framing Hole for Horizontal Installation.

**7.** Slide the decorative wall thimble up to the wall surface and attach with the screws provided.

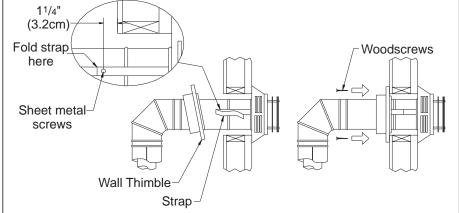


Figure 39: Installing Decorative Wall Thimble.

# **QUALIFIED INSTALLERS ONLY**

# **NOTES:**

- (a) The four (4) wood screws provided should be replaced with the appropriate fasteners for stucco, brick, concrete, or other types of siding.
- **(b)** For buildings with vinyl siding, a vinyl siding standoff, should be installed between the vent cap and the exterior wall (see Figure 40). Attach the vinyl siding standoff to the horizontal termination. The vinyl siding standoff prevents excessive heat from possibly melting the vinyl siding material. Note that the horizontal vent termination bolts onto the flat portion of the vinyl siding standoff (shaded area in Figure 40), so that an air space will exist between the wall and the vent termination.
- (c) The horizontal run of vent pipe must be level and should have a ¼ inch rise for every one foot of run towards the termination. Never allow the vent to run downward. This could cause high temperature and may present the possibility of a fire.
- (d) The location of the horizontal vent termination on the exterior wall must not be easily blocked or obstructed. Refer to section "Vent Configurations" on page 25.
- (e) When installing a vent pipe in a chase the minimum clearance to combustibles is 2" (51 mm).
- **(f)** Maintain manufacturer's clearances to combustibles with venting.

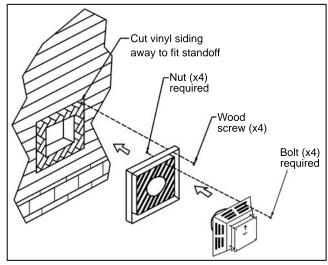


Figure 40: Installing Vent Cap with Vinyl Siding Stand-Off.

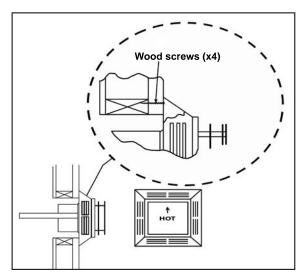


Figure 41: Installing Horizontal Vent Termination.

# **QUALIFIED INSTALLERS ONLY**

# VERTICAL INSTALLATION

- 1. Check the instructions for required clearances (air spaces) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, or other nearby combustible surfaces. Do not pack air spaces with insulation.
- 2. Set the gas appliance in the desired location. Drop a plumb bob down from the ceiling to the position of the appliance flue exit, and mark the location where the vent will penetrate the ceiling. Drill a small hole at this point. Next, drop a plumb bob from the roof to the hole previously drilled in the ceiling, mark the spot where the vent will penetrate the roof. Determine if ceiling joists, roof rafters, or other framing will obstruct the venting system. You may wish to relocate the appliance, or to offset, to avoid cutting load bearing members.
- **3.** To install the Round Support Box/Wall Thimble in a flat ceiling, cut a 10" square hole in the ceiling, centered in the hole drilled in Step 2. Frame the hole as shown in Figure 42.
- **4**. Assemble the desired lengths of black pipe and elbows necessary to reach from the appliance adapter up through the Round Support Box. Insure that all pipe and elbow connections are in their fully twist-locked position.
- 5. Cut hole in the roof centered on the small hole placed in the roof from Step 2. The hole should be of sufficient size to meet minimum requirements for Clearance to Combustibles, as specified. Continue to assemble lengths of pipe and elbows necessary to reach from the ceiling support box up through the roof line. Galvanized pipe and elbows may be utilized in the attic, as well as above the roof line.

The galvanized finish is desirable above the roof line, due to the higher corrosion resistance.

**6.** Once the pipe sections have been joined, and run up through the hole in the roof, slip an elbow strap over the exposed sections, bend the support straps outwards, and push the elbow strap down to the roof level, as shown in Figure 43. Tighten the clamp around the pipe section. Use a level to make sure the pipe is truly vertical. With roofing nails, secure the support straps to the roof. Seal the nails holes heads with non-hardening mastic. Trim the excess length of the support straps that extend out beyond the edge of the flashing.

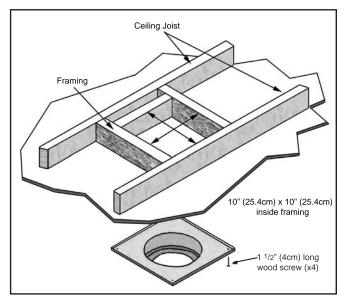


Figure 42: Wall Framing for Hole for Vertical Installation.

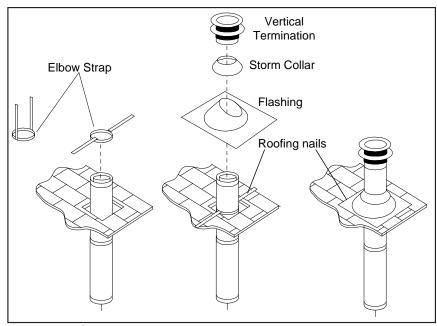


Figure 43: Vertical Vent Termination Installation.

# **QUALIFIED INSTALLERS ONLY**

- 7. Slip the flashing over the pipe section protruding through the roof. Secure the base of the flashing to the roof with roofing nails. Use a non-hardening sealant between the uphill edge of the flashing and the roof. Insure the roofing material overlaps the top edge of the flashing as shown in Figure 43. Verify that you have at least the minimum clearance to combustibles at the roof line.
- 8. Continue to add pipe sections until the height of the vent cap meets the minimum code requirements. Refer to Figure 44 and Table 5. Note that for steep roof pitches, the vent height must be increased. In high wind conditions, nearby trees, adjoining roof lines, steep pitched roofs, and other similar factors can result in poor draft, or down drafting. In these cases, increasing the vent height may solve the problem.
- **9.** Slip the storm collar over the pipe, and push it down to the top of the roof flashing as shown in Figure 43. Use the non-hardening sealant around the joint between the pipe and the storm collar.
- **10.** Twist-lock the vent cap.

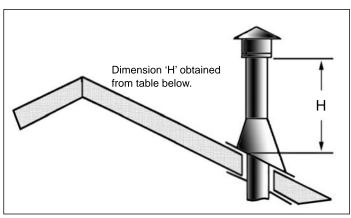


Figure 44: Height of Vertical Termination; Reference Table 5.

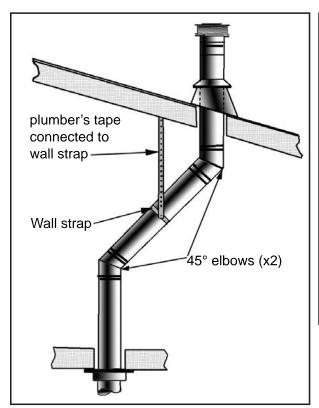
# Table 5: Minimum 'H' for Figure 44. Roof Pitch Minimum He

Roof Pitch	Minimum Height	
	Feet	Meters
Flat to 7/12	1	0.3
Over 7/12 to 8/12	1.5	0.46
Over 8/12 to 9/12	2	0.61
Over 9/12 to 10/12	2.5	0.76
Over 10/12 to 11/12	3.25	0.99
Over 11/12 to 12/12	4	1.22
Over 12/12 to 14/12	5	1.52
Over 14/12 to 16/12	6	1.83
Over 16/12 to 18/12	7	2.13
Over 18/12 to 20/12	7.5	2.29
Over 20/12 to 21/12	8	2.44

#### NOTES:

- (a) If an offset is necessary in the attic to avoid obstructions, it is important to support the vent pipe every 3 feet (91 cm), to avoid excessive stress on the elbows, and possible separation. Wall straps are available for this purpose (see Figure 45).
- **(b)** When ever possible, use 45° degree elbows instead of 90° degree elbows. The 45° degree elbow offers less restriction to the flow of flue gases and intake air.
- (c) For multi story installations. A ceiling firestop is required at the second floor, and any subsequent floors (see Figure 46). The opening should be framed to 10" (25.4 cm) x 10" (25.4 cm) inside dimensions, in the same manner as shown in Figure 42.
- (d) Any occupied areas above the first floor, including closets and storage spaces, which the vertical vent passes through, must be enclosed. The enclosure may be framed and sheet rocked with standard building materials. However consult the appliance manufactures installation instructions for the minimum allowable clearance between the outside of the vent pipe, and the combustible surfaces of the enclosure. Do not fill any required air spaces with insulation.

# QUALIFIED INSTALLERS ONLY



Use clearances to as defined by appliance and vent pipe manufacturers.

Second floor

Figure 46: Multi-Story Vent Pipe Installation.

Figure 45: Use of Wall Straps.

## CATHEDRAL CEILING INSTALLATION

- **1.** Follow installation steps 1 & 2 under section "Vertical Installation" on page 29.
- 2. Using the plumb bob, mark the centerline of the venting system on the ceiling and drill a small hole through the ceiling and roof at this point. From the roof, locate the drill hole and mark the outline of the "Cathedral Ceiling Support Box".
- 3. Remove shingles or other roof coverings as necessary to cut the rectangular hole for the "Support Box". Cut the hole 1/8" larger than the "Support Box" outline.
- **4.** Lower the "Support Box" through the hole in the roof until the bottom of the "Support Box" protrudes at least 2 inches (5 cm) below the ceiling. Align the "Support Box" both vertically and horizontally with a level as shown in Figure 47. Temporarily tack the "Support Box" in the place through the inside walls and into the roof sheathing.

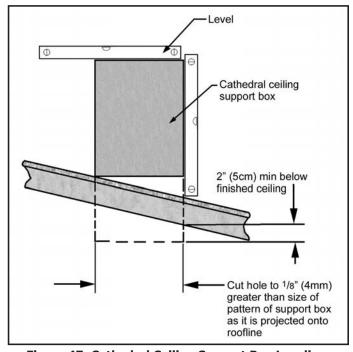


Figure 47: Cathedral Ceiling Support Box Leveling.

# **QUALIFIED INSTALLERS ONLY**

- **5.** Using tin snips, cut the "Support Box" from the top corners down to the roof line, and fold the resulting flaps over the roof sheathing (Figure 48). Before nailing it in to the roof, run a bead of non-hardening mastic around the top edges of the "Support Box", to make a seal between the box and the roof. Clean out any combustible material from the inside of the "Support Box".
- **6.** Complete the cathedral ceiling installation by following the same procedures outlined in Steps 4 through 9 in section "Vertical Installation" on page 29.

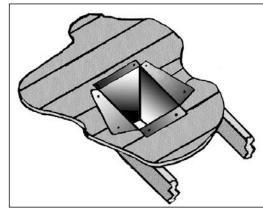


Figure 48: Cathedral Ceiling Support Box Installation.

# **CORNER INSTALLATIONS**

Do not interfere with the structural integrity of the walls.

When rear venting if a 90° bend is used the maximum horizontal vent that can be used is 6" (152mm) and if a 45° bend is used the maximum horizontal vent that can be used is 12" (305mm). For installations with a 36" (915 mm) snorkel refer to Figure 49 and section "Vent Configurations" on page 25. For other corner installations refer to Figure 50 and section "Vent Configurations" on page 25.

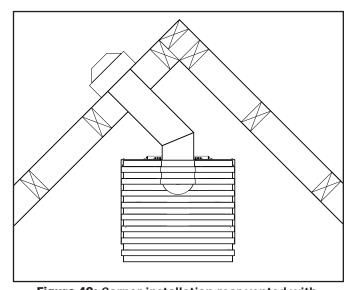


Figure 49: Corner installation rear vented with snorkel.

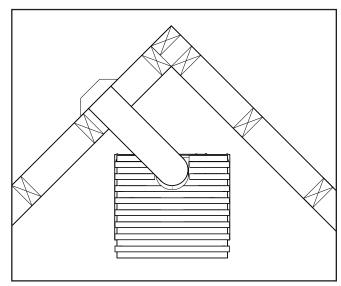


Figure 50: Corner installation top vented.

# **QUALIFIED INSTALLERS ONLY**

# CONVERTING TOP VENTED INTO REAR VENTED

This unit can be converted to a rear vented unit with a 36" (915mm) snorkel for some installation applications. To convert this unit to a rear vented model, the flue pipe adapter must be turned to the rear vent position:

- 1. Remove the top plate as shown in section "Back Cover and Top Plate Removal" on page 17.
- 2. Remove the four (4) #8 hex head screws holding the flue pipe adapter in place (see Figure 51).
- 3. Rotate the flue adapter 180° so that the end of the adapter is now pointing out the rear of the unit.
- 4. Reattach the flue adapter using the same screws that were removed in Step 2.
- 5. Reattach the top cover.
- 6. Find the rear vent cap that was included with the unit. Align the rear vent cap as shown in Figure 52 and fasten into place using two (2) #8 screws.

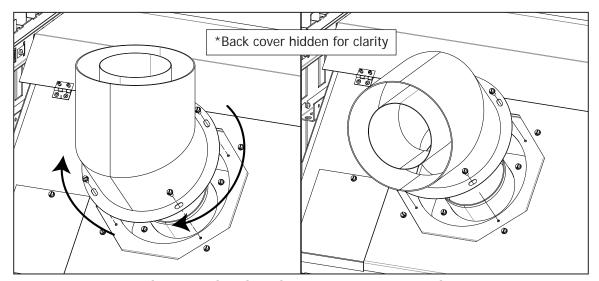


Figure 51: Flue Pipe Adapter - Rear Vent Conversion

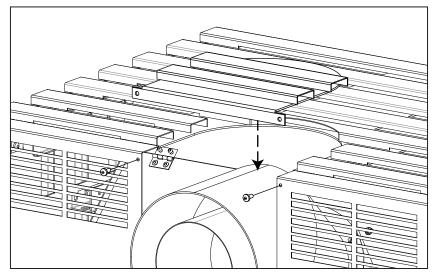


Figure 52: Top Vent Cover Plate

# **QUALIFIED INSTALLERS ONLY**

#### Installation of Rear Vented Appliance

- 1. Place the unit into position.
- 2. Attach a small section of pipe on the unit and mark exterior wall where vent would pass through the wall.
- 3. Cut a 10" (25.4 cm) minimum hole in the wall to maintain clearances to combustibles. Frame hole as shown in Figure 38.
- 4. Install a wall thimble.
- 5. Install interior finished collar.
- 6. Install the vent section through the wall.
- 7. Seal around the vent terminal to the structure using a non hardening mastic.

Also refer to section "Vent Configurations" on page 25.

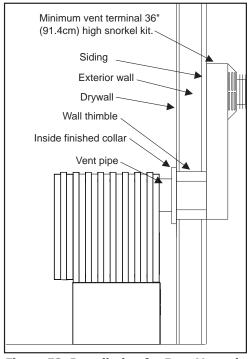


Figure 53: Installation for Rear Vented;

# Installation of Top Vented; Horizontal Termination

This is the most common type of installation style.

Set the unit in place.

Install a minimum 24" (61 cm) vertical chimney.

Install a  $90^{\circ}$  elbow, and mark the exterior wall where the vent would pass through.

Cut a 10" (25.4 cm) minimum hole in the wall to maintain clearances to combustibles around vent pipe. Frame hole if as shown in Figure 38.

Install wall thimble.

Install interior finished collar

Install the vent section through the wall and then install the vent termination.

Seal around the termination using a non hardening mastic.

## **CORNER INSTALLATION:**

This type of installation can be used in a corner installation. If a 90° elbow is used in the horizontal plane, 36″ (91.4 cm) must be subtracted from the allowable horizontal run shown in Figure 34.

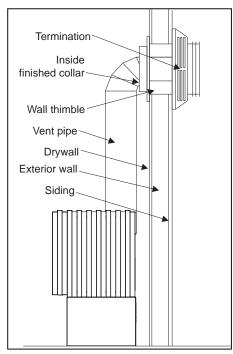


Figure 54: Installation for Top Vented; Horizontal Termination.

# **QUALIFIED INSTALLERS ONLY**

# Installation of Top Vented; Vertical Termination

Place the unit in place.

Drop a plumb bob from the ceiling to the center point of the flue outlet.

Cut a 10" (25.4 cm) hole in the ceiling and the roof. Refer to Figure 42.

Install the ceiling support and insulation guard.

Install the roof flashing. Ensure that the roof flashing is installed under the roofing material so that a watertight seal is created.

Install the flue pipe from the top of the unit through the roof.

Ensure that all flue pipe and unit maintain required clearances to combustibles.

#### **CORNER INSTALLATION:**

This type of installation can be used in a corner installation. If a 90° elbow is used in the horizontal plane, 36" (91.4 cm) must be subtracted from the allowable horizontal run shown in Figure 34.

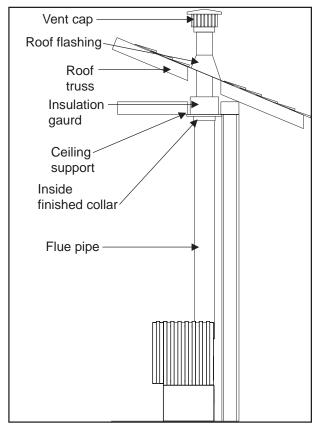


Figure 55: Installation for Top Vented; Vertical Termination.

# Freestanding Drafthood Adaptor - (50-841 & 50-4176)

This Drafthood Adaptor is a complete assembly and is ready to fit onto the Cube in a vertical vent application only. With the Drafthood Adaptor correctly installed and wired to the IFC the Cube may be vented like a B-Vent Fireplace.

#### **INSTALLATION:**

**WARNING:** This Freestanding Drafthood Adaptor must be fitted by a qualified service technician.

- **1.** Remove the Drafthood Adaptor from the packaging. Ensure the unit and wire harness are undamaged. If there is damage contact your dealer, distributor, or courier company before starting this installation.
- 2. Install the adaptor so the wires exit to the rear of the fireplace. Slide the Drafthood Adaptor over the outlet pipe of the fireplace until the bottom of the adaptor collar stops on the top of the outlet. The Drafthood Adaptor must be safely secured to the vent flanges with either self-tapping screws and/or high temperature sealant.

**WARNING:** During the fitting of the Drafthood Adaptor, ensure that the wires are not pinched between the adaptor and the collar and/or flue outlet. Ensure that the opening of the Drafthood Adaptor is not blocked or obstructed.

**3.** Being careful not to run any wiring tight across metal edges; connect them to the X4 terminal block on the IFC (see wiring section).

# QUALIFIED INSTALLERS ONLY

#### **DRAFTHOOD WIRING:**

In order to connect the Drafthood Adaptor to the IFC the spill switch wires must first be modified as instructed below.

**Step 1**: Cut off the connectors from the one end of the wires. Note, the spill switch does not need to be removed from the Drafthood Adaptor for this modification (Figure 56).

**Step 2**: Strip off approx. 1/4" of insulation from the wire ends.

**Step 3**: Remove the ON/OFF terminal block from the X4 port on the IFC (Figure 50).

**Step 4:** Using a small flat blade screwdriver loosen the set screws on the terminal block and remove the wire loop/jumper. The wire jumper can be discarded

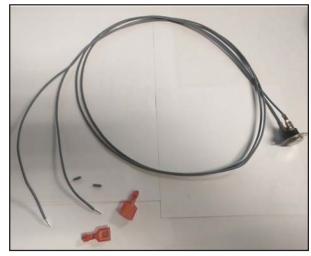


Figure 56: Spill Switch Modification

**Step 5**: Insert the sripped spill switch wires into the ON/OFF terminal block and tighten the set screws. Note: There is no polarity to the spill switch wires so it will work in either position of wires (Figure 51).

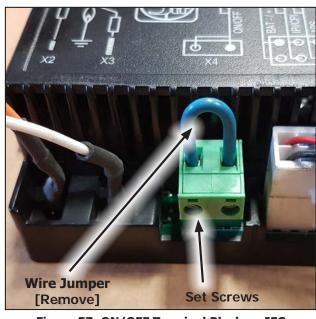


Figure 57: ON/OFF Terminal Block on IFC

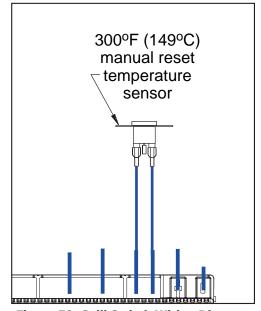


Figure 58: Spill Switch Wiring Diagram

#### **GENERAL VENTING INFORMATION:**

# **Canadian Installations**

The venting system must be installed in accordance with the current CSA B149.1 installation code and/or local codes having jurisdiction.

## U.S.A. Installations

The venting system must be installed in accordance with the current National Fuel Gas Code, ANSI Z223.1/ NFPA 54, and/or local codes having jurisdiction. It is strongly recommended to install an approved chimney liner in an existing brick chimney. This will maximize the potential draft of the chimney and lessen the effects of slow chimney start-up.

Venting and any combustibles when using 4" (10 cm) single wall flexible venting.

### **QUALIFIED INSTALLERS ONLY**

#### VENTING OF A FIREPLACE FITTED WITH THE DRAFTHOOD ADAPTOR:

**Note:** Please refer to the chimney manufacturer's installation instructions prior to commencing the installation.

This unit may be vented to an existing masonry chimney, or where no masonry chimney is available, an approved "B-vent" chimney, or any other approved constructed chimney/vent system (see Figure 52 & 53).

In either case, the fireplace may be connected to the chimney/vent using a 4" (10 cm) single wall vent connector.

When an existing masonry chimney is utilized for the venting, we recommend the vent connector be connected

to an approved 4" (10 cm) diameter flue liner running the full height of the chimney. In many jurisdictions this flue liner may be mandatory.

If 4" (10 cm) single wall vent is used, a minimum of 6" (15 cm) must be maintained between the vent connector and any combustibles.

If 4" (10 cm) "B-vent" is used a minimum of 1" (25 mm) must be maintained between the vent connector and any combustibles.

**CAUTION**: A minimum vent height of 12′ (3.6 m) from the floor is required to effectively vent this fireplace.

#### SPILLAGE TEST:

A spillage test must be performed prior to leaving the installed fireplace with the customer. Perform this test in the following manner:

- 1. Close all windows and doors in the room.
- 2. Start all exhaust fans in the house and the furnace blower.
- 3. Light the fireplace and set to maximum flame adjustment.
- 4. After a minimum of 10 minutes operation, test the chimney draft with a smoke match at the top row of the pattern to confirm that there is adequate draft or 'pull' at the openings around the body of the Drafthood Adaptor, as shown in Figure 54.

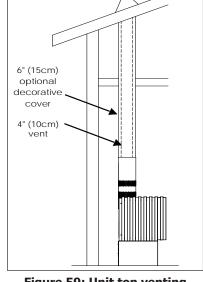


Figure 59: Unit top venting styles.

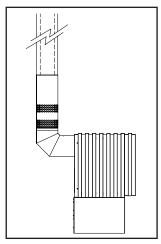


Figure 60: Unit rear venting style.

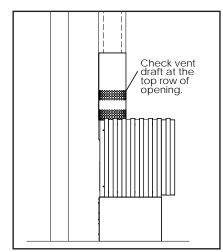


Figure 61: Draft test place.

### **QUALIFIED INSTALLERS ONLY**

#### **AUTOMATIC SAFETY SHUT DOWN:**

If the spill switch is activated and shuts off the main burner the following procedure should be followed.

- Is the pilot flame still on? If not, the reason for the fireplace shut down is not the spill switch.
- Turn off the pilot flame and turn off all controls. Let fireplace to cool down.
- Check for blockages or restrictions in the flue and venting components.
- Restart the fireplace and check for vent draft as described earlier.
- Operate the fireplace in a normal manner.
- If the main burner shuts down again after a period of operation, turn off the fireplace and contact your service technician.

#### SPILL SWITCH REPLACEMENT:

Use the following instructions to replace the Safety Spill Switch.

- 1. Turn the unit off and allow it to cool.
- 2. Disconnect the spill switch wires from the IFC (see Figures 50 & 51).
- 3. Remove the four mounting screws holding the spill switch bracket and remove the bracket (see Figure 55).
- 4. Remove and replace the spill switch with a 50-885 Spill Switch Assembly using a T-20 torx type driver.
- 5. Follow the reverse of the previous steps.



Figure 62: Spill switch installation.

#### **OPTIONAL FINISHING:**

In installations where the flue connector is running from the drafthood into a non-combustible chimney the following optional finishing technique can be used.

CAUTION: Installations where the flue connector or venting connects to, or passes through, combustible walls or ceilings, the inner vent components must be 'B-vent'. It is not allowable in these applications to use single wall inner vent components.

For decorative purposes a 6" (15 cm) single wall black stove pipe may be installed over the 4" (10 cm) single wall or 'B-Vent'.

Note: The use of these components is for aesthetic purposes only and does not effect the fact that the fireplace, when fitted with the Drafthood Adaptor, is a Natural Vent appliance and therefore draws air in through the Drafthood Adaptor intake ports.

### **QUALIFIED INSTALLERS ONLY**

#### GAS LINE CONNECTION AND TESTING

**WARNING:** Only persons licensed to work with gas piping may make the necessary gas connections to this appliance.

#### GAS LINE CONNECTION

• This stove is equipped with a certified flexible pipe located on the right side of the unit terminating in a 3/8" male NPT fitting. Consult your local authorities codes or the CAN/CGA B 149 (1 or 2) installation code

in Canada, or in the USA gas installations follow either local codes or the current edition of the National Fuel Gas Code ANSI 7223.1.

• The efficiency rating of this appliance is a product thermal efficiency rating determined under continuous operating conditions and was determined independently of any installed system.

The appliance and its shutoff valves must be disconnected from the gas supply piping system during any pressure testing where the pressure exceeds  $\frac{1}{2}$  PSIG (3.45 KPa) or damage will occur to the valve.

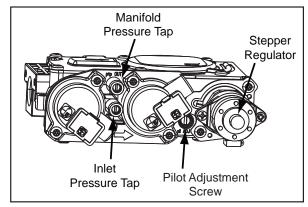


Figure 63: Fully Labeled Gas Valve.

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than  $\frac{1}{2}$  psig (3.45 KPa).

# Always check for gas leaks with a soap and water solution after completing the required pressure test.

#### TO TEST VALVE PRESSURES

The pressure taps are located on the left side of the valve

- Turn set screw 1 turn counter clockwise to loosen,
- Place 5/16" (8 mm) I.D. hose over pressure tap system.
- · Check pressures using a manometer.
- When finished, release pressure, remove hose & tighten set screw.

	Natural Gas	Propane		
Main Burner	#39 DMS	#53 DMS		
Manifold Pressure	3.8" W.C. / 0.95KPa	11.0" W.C. / 2.7KPa		
Min. Manifold Pressure	1.2" W.C. / 0.29KPa	2.9" W.C. / 0.72KPa		
Max Supply Pressure	7.0" W.C. / 1.74KPa	13.0" W.C. / 3.28KPa		
Min. Supply Pressure	5" W.C. / 1.24KPa	12.0" W.C. / 2.98KPa		
Max BTU/hr Input	30,000 BTU/hr (8.80KW)	26,500 BTU/hr (7.76KW)		
Min. BTU/hr Input	17,000 BTU/hr (4.98 KW)	14,000 BTU/hr (4.10KW)		
Venturi Setting 1/16" min.		<sup>3</sup> /16" min.		

Table 6: Pressure and BTU Information.

## **NEVER USE AN OPEN FLAME FOR LEAK TESTING.**

### **QUALIFIED INSTALLERS ONLY**

## **ELECTRICAL REQUIREMENTS**

The fireplace must be electrically connected and grounded in accordance with local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code Part 1, Safety Standards For Electrical Installations, or The National Electrical Code ANSI / NFPA 70 in the US.

**WARNING:** The electrical grounding instructions must be followed. The fan kit is equipped with a three-prong (grounding) plug for your protection against shock hazard, and should be plugged directly into a properly grounded three-prong outlet. DO NOT cut or remove the grounding prong from this plug.

**CAUTION:** When servicing controls, label all wires prior to disconnection. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

If any of the original wire as supplied with the appliance must be replaced, it must be replaced with 18 AWG wire with a temperature rating of 105°C

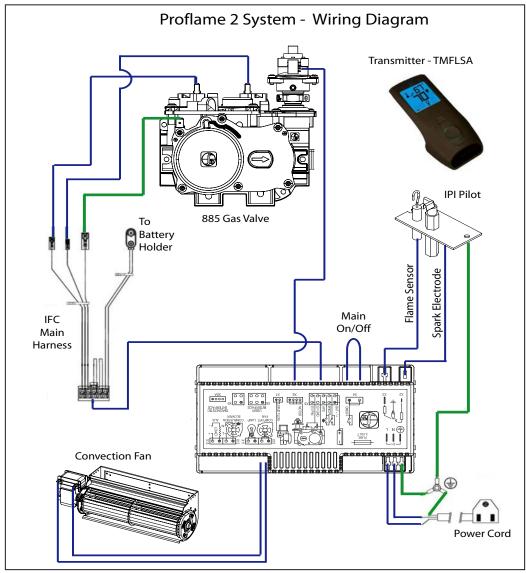


Figure 64: Wiring Diagram

## Installation of Optional Fan Kit (50-4304)

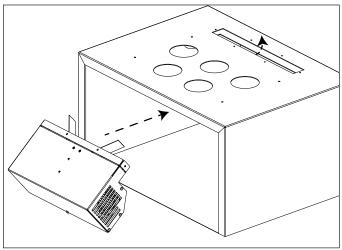


Figure 65: Optional Fan Kit Installation.

- Remove the pre-assembled fan assembly from the packaging. Inspect the fan for damage. If damage is noticed call your dealer, distributor or courier company and have components replaced.
- 2. Align the fan kit with the rectangular hole in the table/long table, bend the flanges, and secure with #8 T20 screws.
- 3. Follow the wiring instructions supplied with the kit and complete installation.

Refer to the installation instructions included with the fan kit for additional details.

#### Installation of Log Set and Embers

The placement of the logs is not arbitrary. If they are positioned incorrectly, the flames can be "pinched" and will not burn correctly. The burner come with four (4) locator pins, and the right log has two (2) ledges which make alignment easier. Using the pictures provided, carefully set the logs in place.

# NOTE: The logs are fragile and should be handled gently.

**CAUTION:** Use only the type of ember material supplied with this appliance. Due to the irregular size of the ember material there may be more than required. The use of other foreign materials on the burners may create dangerous conditions.

If over time, through cleaning and servicing, these embers require replacement, contact the nearest ENVIRO dealer for replacement embers.

Note: Log set shown with optional panel set (50-1038) installed.

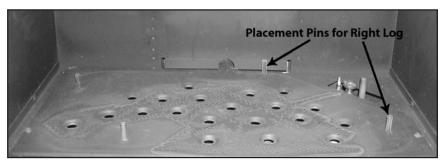


Figure 66: Step 1 of Log Placement.

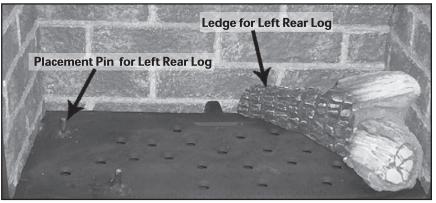


Figure 67: Step 2 of Log Placement.

- 1. Carefully remove logs from box. Check to ensure there is no damage. It is very important to install all logs in their proper position to insure safe, optimum operating conditions.
- 2. Place the log set into the firebox. Locate each log by seating it down onto the burner tray support pins. Follow Figure 66 to Figure 72 proper log placement.
- 3. A bag of ceramic fiber embers and rock wool embers is provided gently remove the ember material from the plastic bag. Spread a layer loosely in a random manner across the burner tray. Do not allow any embers to rest against pilot assembly. (See diagram provided for proper ember placement.)

DO NOT pack this ember material as this could create an unsafe condition, leave embers loose.

- 4. Upon the first light up, watch for ignition to **ALL** burner ports. If a long delay is noted: First, wait for the appliance to cool down.
- Open the front door of the appliance.
- Check to carefully reposition the embers making sure that burner ports are not plugged solid or blocked.

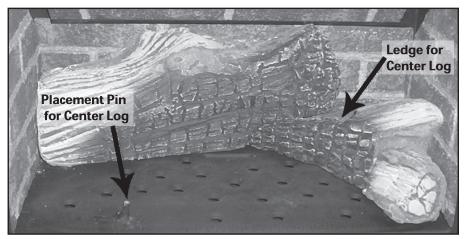


Figure 68: Step 3 of Log Placement.

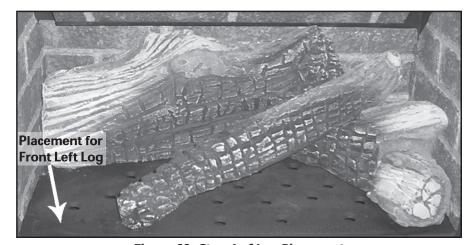


Figure 69: Step 4 of Log Placement.

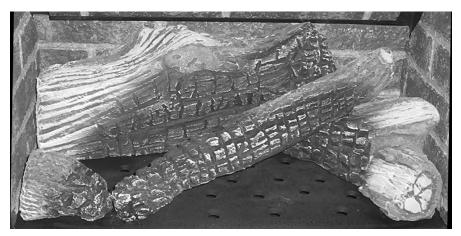


Figure 70: Complete Log Placement.

**Important note:** When the unit is turned on for the first time, It should be turned onto high without the fan on for the first four (4) hours. This will cure the paint, logs, gasket material and the other products used in the manufacturing process. It is advisable to open a window or door, as the unit will start to smoke and can irritate some people. After the unit has gone through the first burn turn the unit off including the pilot, let the unit get cold then remove the glass door and clean it with a good gas fireplace glass cleaner, available at your local ENVIRO dealer.

See section "Cleaning The Glass" on page 16 for details on how to remove door to clean glass.



Figure 71: Log Placement with Rock Wool.



Figure 72: Log Placement with Rock Wool & Embers.



Figure 73: Appliance Burning.

CAUTION: NEVER OPERATE THIS APPLIANCE WITH THE GLASS DOOR REMOVED.

## Installation of Optional Panel Set (50-1038)

Do not install when the unit is hot.

The panel set is fragile. Handle panels with care and avoid knocking them on the placement pins or any other object.

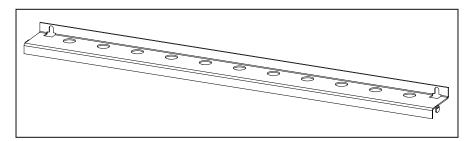


Figure 74: Panel bracket, slots shown.

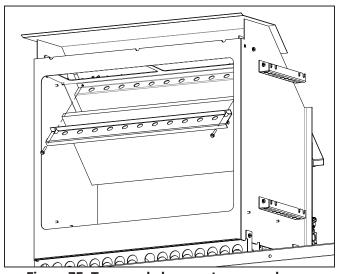


Figure 75: Top panel placement, screws shown.

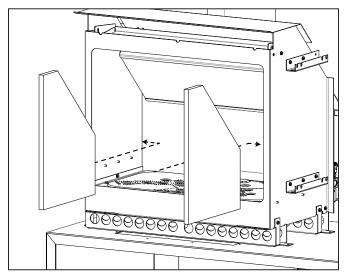


Figure 76: Side brick panel placement.

- 1. Remove the two (2) screws from the rear of the baffle, use a ¼" socket. Place the panel bracket (Figure 74) at the rear of the baffle with the slots over the screw holes (see Figure 75). Insert two (2) of the provided screws into the two (2) holes along the bottom of the baffle.
- 2. Remove the two (2) screws from the front of the baffle. Slide the top brick panel into the bottom bracket and place the other bracket over the top of the panel and line up the slots on the bracket with the holes at the top of the baffle. Use two (2) of the provided screws to hold the bracket in place. Ensure the top panel is centered before tightening the four (4) screws completely (refer to Figure 75).
- 3. Slide each side brick panel into place along the sides of the firebox. The panels should rest flush with the back and sides of the firebox (refer to Figure 77).

## REMOVAL OF SAFETY SCREEN

If necessary, the safety screen can be removed from its assembly for cleaning or replacement by following the steps below.

- 1. Turn off the stove and allow it to fully cool down.
- 2. Remove the safety screen assembly from the unit. Refer to section "Screen and Outer Glass Removal" on page 16
- 3. Lay the screen assembly face down on a soft surface to prevent scratching the paint.
- 4. Remove the two (2) #8 T20 screws on the inner top face of the assembly (see Figure 78).
- 5. Unbend the two (2) hand tabs on the outer bottom face of the assembly (see Figure 78).
- 6. Remove the left and right inner trim pieces from the assembly. This will free the safety screen allowing it to also be removed.

To re-install the safety screen simply reverse the procedure.

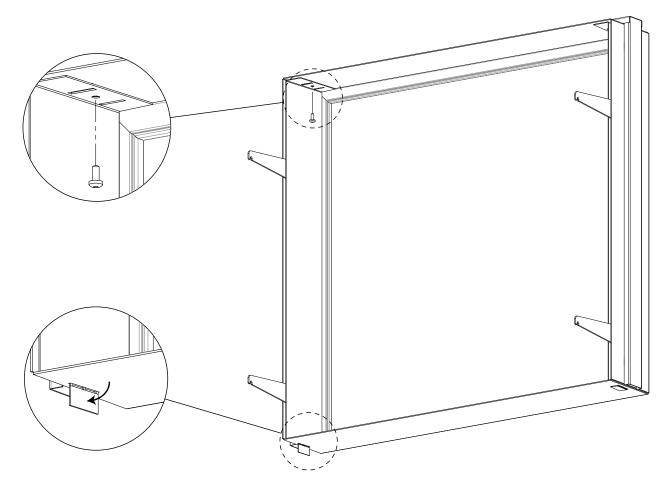


Figure 77: Safety Screen Removal

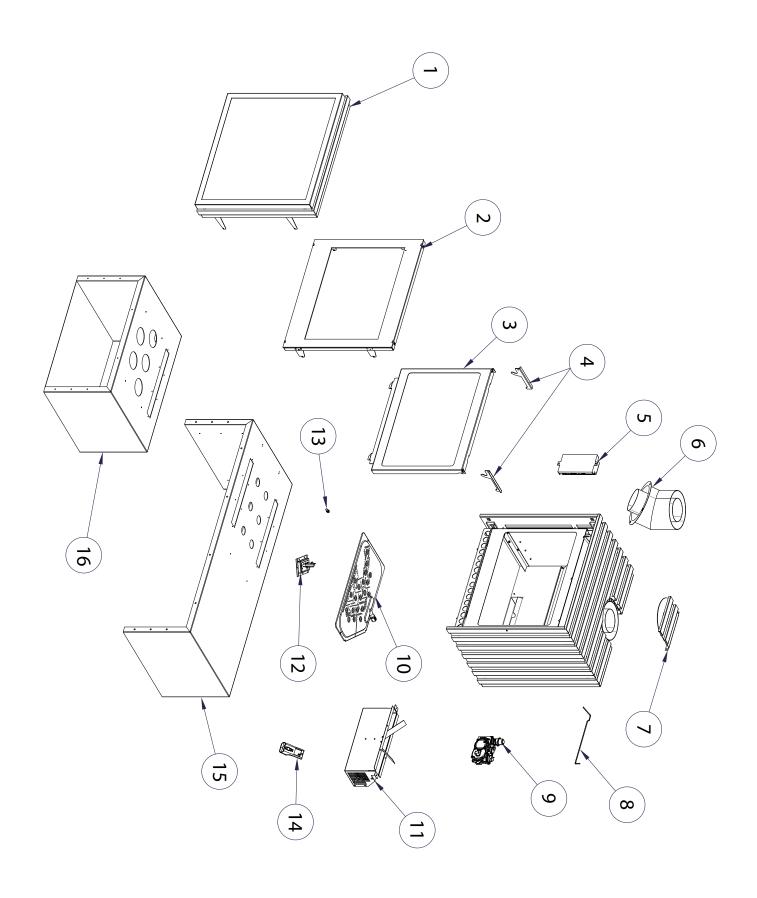
# TROUBLE SHOOTING

Problem	Possible Cause	Solution	
The main burner does not ignite when called for.	The gas valve may not be on.	Check that the gas control knob is in the "ON" position.	
	Thermostat is not calling for heat.	Adjust the thermostat several degrees above ambient temperature.	
	Problem with gas valve.	<ul> <li>Use a DC voltmeter to measure the voltage across the TPTH and TP terminals. Main operator voltage: Open circuit ≥ 325mV Closed circuit ≥ 100mV</li> <li>If voltage is not present, check the control circuit for proper operation.</li> <li>If proper control system voltage is present, replace the gas control.</li> </ul>	
Spark will not light the pilot after repeatedly pressing the spark ignitor.	Defective piezo ignitor.	<ul> <li>Check connections to ignitor.</li> <li>If ignitor connections are good but no spark, replace ignitor.</li> </ul>	
	Broken spark electrode.	Check for broken ceramic insulation, replace electrode if broken.	
	Misaligned spark electrode.	• If spark is not arcing from electrode to pilot, loosen the screws on the pilot base adjust and tighten.	
Pilot will not remain lit.	Problem with thermocouple circuit.	<ul> <li>Check for proper connection of the thermocouple to the rear of the valve. If loose, fully tighten.</li> <li>Check pilot for full flame impingement around thermocouple. If flame is too small, check gas pressure, adjust pilot rate screw, check pilot head for damage.</li> <li>Check thermocouple voltage at valve. It must be greater than 5 mV. If low, replace thermocouple.</li> </ul>	
	Air in gas line (pilot dies while knob is depressed).	Bleed line.     Check gas line pressure.     Contact dealer.	
Burners will not remain lit.	Problem with thermopile circuit.	<ul> <li>Check gas line pressure .</li> <li>Check for flame impingement on thermopile. If low, see "Pilot will not remain lit".</li> <li>Check thermopile for minimum of 300 mV when burner is switched on.</li> <li>Check wiring to thermostat for breaks.</li> </ul>	
Flame lifting	Leak in vent pipe	Check for leaks in vent connections.	
	Improper vent configuration	Check vent configuration with manual.	
	Terminal may be recirculating flue gases	<ul><li>Check to see if terminal is on correctly.</li><li>May need to install high wind termination cap.</li><li>Contact dealer.</li></ul>	
Glass fogs up	Normal Condition: after the appliance warms up the glass will clear.  **Due to additives in gas, glass may get hazy during operation** Clean as needed.		
Blue Flames	Normal during start up: flames	will yellow as the fireplace heats up.	
Flames are burning "dirty" or sooting	Flame impingement	Check log positioning.     Increase primary air by opening the venturi shutter and/ or by opening the vent restrictor.     See also "Burners will not remain lit."	
Remote control doesn't work	Problem with the remote	<ul> <li>One or more of the batteries are dead. See remote control instructions.</li> </ul>	
	Problem with fireplace	<ul> <li>The on/off switch is turned to OFF.</li> <li>The gas control valve is turned to PILOT or OFF.</li> <li>The pilot has gone out.</li> </ul>	

# PARTS LIST

Table 7: Parts List

Reference Number	Part Description	Part Number
1	Cube Replacement Screen	50-4301
2	Cube Outer Glass Assembly	50-4322
3	Inner Door Only - Painted	EGWP-092
4	Inner Door Handles (2 per set)	30-052
-	Window Channel Tape	50-634
5	Proflame 2 IFC	50-3791
-	Proflame 2 Wire Harness (0.584.924)	50-3030
6	45deg Elbow & Gasket	50-040
7	Cube Rear Block Off Plate	50-4313
8	Cube Venturi Adjustment Rod	50-4314
9	S.I.T. 885 Valve w/NG Stepper Motor	50-2682
10	Westport Burner Assembly	30-055
11	Cube IPI Fan Kit 150 CFM - SIT	50-4304
12	PSE IPI Pilot Assembly (2021)	50-4058
-	IPI Pilot Orifice (2021)	50-4080
13	Blank Orifice #73 - All Gas Models	50-343
14	Proflame 2 Transmitter - Hand Held	50-3265
15	Cube Long Table	50-4303
16	Cube Table	50-4302
-	Cube Owner's Manual	50-4315
-	NG to LP Stepper Motor Only	50-3753
-	LP to NG Stepper Motor Only	50-3870





# **ENVIRO** Warranty for Enviro **Gas** Products

Sherwood Industries Ltd. ("Sherwood") hereby warrants, subject to the terms and conditions herein set forth, this product against defects in material and workmanship during the specified warranty period starting from the date of original purchase at retail. In the event of a defect of material or workmanship during the specified warranty period, Sherwood reserves the right to make repairs or to assess the replacement of a defective product at Sherwood's factory. The shipping costs are to be paid by the consumer. All warranties by Sherwood are set forth herein and no claim shall be made against Sherwood on any oral warranty or representation.

#### Conditions

- A completed warranty registration must be submitted to Sherwood within 90 days of original purchase via the online warranty registration page or via the mail-in warranty registration card provided. Have the installer fill in the installation data sheet in the back of the manual for warranty and future reference.
- This warranty applies only to the original owner in the original location from date of install.
- The unit must have been properly installed by a qualified technician or installer, and must meet all local and national building code requirements.
- The warranty does not cover removal and re-installation costs.
- Sherwood Industries Ltd. reserves the right to make changes without notice.
- Sherwood Industries Ltd. and its employees or representatives will not assume any damages, either directly or indirectly caused by improper usage, operation, installation, servicing or maintenance of this appliance.
- A proof of original purchase must be provided by you or the dealer including serial
- This warranty does not cover any discoloration of the safety screen mesh.

#### **Exclusions**

An expanded list of exclusions is available at www.enviro.com/help/warranty.html This warranty does not cover:

- Damage as a result of improper usage or abuse.
- Damage caused from over-firing due to incorrect setup or tampering.
- Damage caused by incorrect installation.

#### To the Dealer

- Provide name, address and telephone number of purchaser and date of purchase.
- Provide date of purchase. Name of installer and dealer. Serial number of the appliance. Nature of complaint, defects or malfunction, description and part # of any parts replaced.
- Pictures or return of damaged or defective product may be required.

#### To the Distributor

Sign and verify that work and information are correct.

#### Sherwood Industries Ltd.

6782 Oldfield Road, Victoria, BC. Canada V8M 2A3 Online warranty registration: www.enviro.com/warranty/

Category	One Year	Two Year	Limited Lifetime (7yr)
Parts 1,2 (unit serial number required)		<b>✓</b>	
Firebox Liner Panels <sup>3</sup>		<b>✓</b>	
Firebox			<b>✓</b>
Heat Exchanger			<b>✓</b>
Burner			<b>~</b>
Ceramic Logs <sup>4</sup>			<b>✓</b>
Ceramic Glass 5	✓		
Pedestal / Legs (excluding finish)			<b>✓</b>
Door Assembly			<b>~</b>
Surround Panels (excluding finish)			<b>✓</b>
Exterior Panels (excluding finish)			Up to 5 years
Electrical Components		<b>✓</b>	
Exterior Surface Finishing	✓		
Labour	✓		

- 1 Whereas warranty has expired, replacement parts will be warrantied for 90 days from part purchase date. Labour not included. Unit serial number required.
- <sup>2</sup> 50-173 Westport Fan Kit covered for up to 5 years from purchase date. Labour not included. Unit serial required.
- <sup>3</sup> Excluding damage to the finish caused by improper setup of the appliance, or color changes.
- <sup>4</sup> Log set and panels excludes wear and tear or breakage caused by cleaning or service.
- <sup>4</sup> Glass is covered for thermal breakage. Photos of box, inside of door, and unit serial # must be supplied for breakage due to shipping.
- <sup>6</sup> Exterior Surface finishing covers plating, enamel or paint and excludes colour changes, chipping, and fingerprints. Travel costs not included.

## INSTALLATION DATA SHEET

The following information must be recorded by the installer for warranty purposes and future reference.

NAME OF OWNER:	NAME OF DEALER:
ADDRESS:	ADDRESS:
ADDRESS:	ADDRESS:
PHONE:	PHONE:
MODEL:	NAME OF INSTALLER:
	NAME OF INSTALLER.
SERIAL NUMBER:	
DATE OF PURCHASE: (dd/mm/yyyy)	
	ADDRESS:
DATE OF INSTALLATION:(dd/mm/yyyy)	
☐ NATURAL GAS (NAT) ☐ PROPANE(LPG)	· <del></del>
INLET GAS PRESSURE:in wc	
	PHONE:
MAIN BURNER ORIFICE:# DMS	PHONE:
PILOT ORIFICE #ORin diam.	
INSTALLER'S SIGNATURE:	

MANUFACTURED BY:
SHERWOOD INDUSTRIES LTD.
6782 OLDFIELD RD. SAANICHTON, BC, CANADA V8M 2A3
www.enviro.com
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